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#### ABSTRACT

This plan provides information on the efforts of Arizona's Estrella Mountain Community College (EMCC) to evaluate its effectiveness in achieving organizational mission and purpose. The plan contains the following information: (1) a discussion of EMCC's institutional effectiveness efforts to date, indicating that the college's Plan for Institutional Effectiveness (PIE) team has implemented a set of core indicators of effectiveness and begun development of related college goals; (2) definitions of and guiding principles related to institutional effectiveness; (3) a description of EMCC's model of institutional effectiveness, indicating that it focuses on career preparation, transfer preparation, developmental education, general education, customized education, and community development; (4) a review of the links between the PIE model and EMCC's strategic and student academic achievement plans; (5) a list of core indicators of effectiveness developed around eight college purposes; (6) plans for continuous improvement and for communicating core indicators to internal and external stakeholders; (7) a list of challenges that must be addressed to continue implementing the plan; and (8) a timetable for implementation. Appendixes provide EMCC's mission and purpose statements, PIE team members and roles, definitions of indicators of effectiveness and measures, lists of institutional effectiveness stakeholders and category leaders, a description of the process used to identify core indicators and measures, EMCC's core indicators and measures, and the PIE continuous improvement plan template. (TGI)

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# ESTRELLA MOUNTAIN PLAN FOR INSTITUTIONAL EFFECTIVENESS 1997-1998

Prepared by

Estrella Mountain Community College

Office of Institutional Effectiveness

June 1997

Avondale, Arizona 85323-1000

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### **INTRODUCTION & PURPOSE**

The Plan for Institutional Effectiveness (PIE) is one of three interrelated Estrella Mountain planning efforts. The other two components include: Strategic Planning and Student Academic Achievement Planning.

The primary purpose of the Plan for Institutional Effectiveness is to ensure that Estrella Mountain regularly evaluates how successfully it's achieving its Mission and Purposes. It is intended that the outcome of the plan will result in continuous improvement. The Estrella Mountain Mission and Purposes are included as Appendix A.

#### This document provides:

- ♦ background information on the Estrella Mountain institutional effectiveness efforts to date
- ♦ the EMCC Model of Institutional Effectiveness and its relationship to the nationally recognized American Association of Community Colleges Core Indicators of Effectiveness Model
- ♦ the link between the Plan for Institutional Effectiveness, the Strategic Plan and the Student Academic Achievement Plan
- a plan for continuous improvement, using core indicators of effectiveness
- ♦ a plan for communicating the Core Indicators of Effectiveness to internal and external stakeholders
- ♦ a list of identified challenges that must be addressed to continue effective implementation of the plan
- ♦ a timetable for continued implementation of the Estrella Mountain Core Indicators of Effectiveness model



# BACKGROUND

In the Fall of 1995, Estrella Mountain Community College began work to develop a way to document institutional effectiveness. A team was created for the purpose of developing and implementing a Plan for Institutional Effectiveness (PIE). This team is referred to as the PIE Team and is one of three major planning teams still operating at EMCC. The other two planning teams are the Strategic Planning Steering Team and the Student Academic Achievement Committee (SAAC).

The membership of the PIE Team is comprised of full-time faculty and staff from all employee groups. A PIE Team membership list is included as Appendix B. The role of the team is included as Appendix C.

The PIE Team is now in its second year of existence and completed the following tasks during the 1996-1997 school year:

- ♦ published the 1996-1997 Plan for Institutional Effectiveness on the EMCC Web Pages
- implemented the first set of Core Indicators of Effectivenes
- worked with the EMCC Institutional Self-Study Team to to integrate core indicators of effectiveness with the evaluation of Criteria 3
- published the first core indicator results in the 1996 EMCC Institutional Self-Study which helped to identify areas of institutional improvement
- ♦ formed two work teams to begin core indicator development for student development (services) and community education
- began development of college goals based on core indicators of effectiveness



# INSTITUTIONAL EFFECTIVENESS DEFINITIONS & GUIDING PRINCIPLES



To ensure a common understanding and provide guidance throughout the development of the Plan for Institutional Effectiveness, the PIE Team created the following Estrella Mountain definition of institutional effectiveness and a set of guiding principles.

"Institutional effectiveness is a process of assessment which demonstrates that the college is successfully achieving its mission and purposes."

#### **GUIDING PRINCIPLES:**

#### The institutional effectiveness process:

- 1. is an integral part of the Estrella Mountain strategic planning process
- 2. converts the mission and purposes into measurable goals, objectives, and outcomes
- 3. establishes internal and external benchmarks to measure the college's progress over time
- 4. provides feedback that student needs are being met
- 5. functions as a feasible, systematic, and campus-wide process for evaluation and measurement
- 6. meets the requirements for public accountability
- 7. relies on multiple measures
- 8. has resources allocated for appropriate administration of the plan
- 9. includes participation from members of all employee groups
- 10. serves as a cost effective continuous improvement tool
- 11. provides relevant feedback for decision making, policy making, and the development of new products and services





# CORE INDICATORS OF EFFECTIVENESS MODEL

During the Fall 1995 semester the PIE Team adopted *Community Colleges: Core Indicators of Effectiveness* model created by the American Association of Community Colleges (AACC).

The AACC model focuses on student progress and six common community college mission categories. Student progress provides an overall picture of student success by assessing student goal attainment, persistence (retention) and degree completion rates. The six mission categories focus on documenting success in:

- career preparation
- ♦ transfer preparation
- ♦ developmental education
- ♦ general education
- ♦ customized education
- ♦ community development

Core indicators of effectiveness and corresponding measures are suggested for each of the six mission categories and student progress. For example, transfer rate and success after transfer are recommended by AACC as core indicators for the transfer mission (purpose) category. Included as Appendix D are definitions of a core indicator and a measure that have been adopted by the Plan for Institutional Effectiveness Team.

Five of Estrella Mountain's eight Mission Purposes are matched to the AACC mission categories. Because Estrella Mountain included at least three unique purposes, it was necessary to adapt the AACC model. The Estrella Mountain model includes eight categories of institutional effectiveness (2 more than the AACC model) that are linked to the Estrella Mountain Mission and Purposes. As the Mission and Purposes change it may be necessary to continue to adapt the model .

Some student progress measures such as goal attainment and degree completion have been integrated into these categories of institutional effectiveness. Overall student persistence is not presently included in the EMCC model, but will be added during the 1997-1998 school year.

Estrella Mountain core indicators of effectiveness were developed in conjunction with the stakeholders of each purpose statement. Stakeholders can be internal (employees) external (students, community members etc.). A list of stakeholders and Plan for Institutional Effectiveness category leaders is included as Appendix E.

Focus groups for each purpose statement were conducted with internal stakeholders. All of the focus groups were asked a version of the following questions:

- ♦ Who do you serve?
- How do you know they are successful?



Key stakeholders (employees with direct responsibility for a purpose) and Plan for Institutional Effectiveness Team members drafted core indicators and corresponding measures using stakeholder focus group data, national core indicator data and the definitions of a core indicator and measure. The process used to identify core indicators and measures is included as Appendix F.

The Estrella Mountain Model of Institutional Effectiveness, illustrated on the next page, is intended to demonstrate the relationship between mission, purposes, core indicators and measures. The model also includes four driving forces that need to be addressed in every stage of the development and implementation of core indicators. These driving forces are:

- ♦ Definition and Guiding Principles of Institutional Effectiveness
- Stakeholders
- ♦ Continuous Improvement
- ♦ National Trends

Influential forces play a significant role in the process Estrella Mountain uses to create core indicators of effectiveness.



# 

The following elements and their relationship to the model are defined below.

- ♦ Mission and Purposes are the focus of the Estrella Mountain Institutional Effectiveness Model.
- ♦ Core Indicators are widely recognized outcomes that measure how effectively the college is achieving its mission and purposes.
- Measures are the information used to evaluate core indicators.
- ◆ Definitions and Guiding Principles of Institutional Effectiveness are used as an internal check to ensure quality design and implementation of the Plan for Institutional Effectiveness.
- ♦ Stakeholders are internal (employees) and external (students and community members) customers who have a stake in an Estrella Mountain purpose. They are included in all phases of the model.
- National Trends in institutional effectiveness, including nationally accepted core indicators, run throughout the model to demonstrate the importance of seeking new ideas and validating the model with commonly accepted assessment practices.
- ♦ Continuous Improvement is integrated with all phases of the model from the design of the core indicators to their use in improving mission and purpose outcomes.

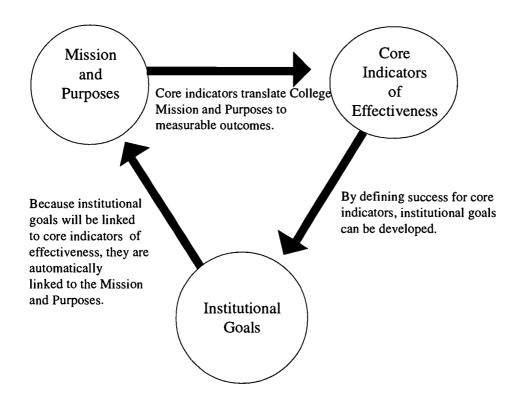


#### LINKS TO STRATEGIC PLANNING



The Plan for Institutional Effectiveness is directly linked to Strategic Planning at Estrella Mountain because both focus on the achievement of the Mission and Purposes.

During the summer and fall of 1997 the core indicators of effectiveness will be used to develop new institutional goal statements for Estrella Mountain. Once this is accomplished, the tie between the two planning efforts will be solidified. As shown in the diagram below, Estrella Mountain's Core Indicators of Effectiveness may act as a performance measure for both the achievement of the college mission and the effectiveness of Estrella Mountain's strategic planning.





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### LINKS TO STUDENT ACADEMIC ACHIEVEMENT

The Plan for Institutional Effectiveness and the Student Academic Achievement Plan are related but separate plans. The Plan for Institutional Effectiveness focuses on institutional outcomes not directly related to academic achievement, while the Student Academic Achievement Plan documents student learning. Both plans are critical components to measuring overall institutional effectiveness.

The table below illustrates the difference in focus between the Plans.

#### **Institutional Effectiveness**

#### Plan for Institutional Effectivness

**Example Outcomes** 

- Student Goal Attainment
- University Transfer Rates
  - Job Placement Rates
  - Student Satisfaction
  - Graduation Rates
  - Student Retention

# Student Academic Achievement Plan

**Example Outcomes** 

- Student Attainment of Abilities (Critical Thinking, etc.)
- Academic performance after transfer
- Success in Subsequent Courses
  - Common Finals
- Student Portfolio Assessment
  - Grades (least important)

The Plan for Institutional Effectiveness asks the question "Are students and the community getting what they want from the college?", while the Student Academic Achievement Plan asks "Are students learning?"

Although the Plan for Institutional Effectiveness does not directly measure student academic achievement, some measures may indirectly measure student learning. One example is job placement. It is likely that a student who obtains employment has achieved academically. However, job placement may also be effected by the quality of advisement, career counseling and the personal experience of the former student. Therefore, job placement does not directly measure academic achievement, but it is still a good institutional outcome measure.



Many colleges choose to merge institutional effectiveness and academic achievement into a single plan. Estrella Mountain has chosen to maintain separate plans for several reasons. They are:

- 1. Keeping the Student Academic Achievement Plan separate helps to ensure that faculty take the lead role in measuring and improving student learning.
- 2. Maintaining separate plans helps to ensure that general institutional outcomes are not confused with measures of student academic achievement.
- 3. Maintaining separate but highly related plans helps to focus implementation efforts.





# ESTRELLA MOUNTAIN CORE INDICATORS OF EFFECTIVENESS

The following table outlines the core indicators of effectiveness that have been developed for each college purpose. A complete list of core indicators and measures is included as Appendix G.

#### **Purpose 1**

To provide a solid foundation of general education so that all individuals are prepared to achieve personal, and academic goals and to successfully execute civic and social responsibilities.

#### **Core Indicators:**

- 1. Student attainment of Estrella Mountain abilities
- 2. Successful completion of general education courses
- Variety and depth of general education courses offered and taken

#### Purpose 2

To offer coursework and programs that will allow individuals to transfer to fouryear institutions for the pursuit of baccalaureate degrees.

#### **Core Indicators:**

- Successful student transfer to fouryear institutions
- 2. Success at transfer institution
- 3. Degree program completion

#### Purpose 3

To offer developmental education courses, programs, and services that prepare individuals for post-secondary education.

#### **Core Indicators:**

- Successful performance in developmental education and subsequent related courses
- Continued enrollment in other academic college-level courses
- Developmental student goal attainment
- 4. Demonstration of the use of instructional support services

#### **Purpose 4**

To develop and offer degrees, certificates, and courses for employment, and upgrading of skills.

#### **Core Indicators:**

- 1. Number of occupational degree, certificate, and selected program completers
- 2. Job placement and promotion rate
- 3. Employer feedback
- 4. Goal attainment of non-degree career/employment students



#### Purpose 5

To serve as a national model for integration of information technologies into the teaching, learning, and working environment.

#### **Core Indicators:**

- 1. Demonstration of the availability and use of information technologies in the teaching and learning environment
- 2. Demonstration of the availability and use of information technologies in the working environment

#### Purpose 6

To actively participate in partnerships with government, business, social service agencies, and other educational entities for improved quality of life and to meet volunteer service needs of the community.

#### **Core Indicators:**

- 1. Demonstration of partnership development
- 2. Demonstration of benefit to Estrella Mountain partners

#### Purpose 7

To demonstrate a commitment to diversity through recruiting and supporting capable students, faculty, and staff who are from varied backgrounds and contribute richly different perspectives to the learning environment.

#### **Core Indicators:**

- 1. Employee demonstration of respect and tolerance for individual differences
- 2. The degree to which the College adheres to all federal, state, and district policies regarding diversity
- 3. The degree to which the college reflects the demographics of its service area in its student population
- 4. The number of College courses, initiatives, and services that support diversity

#### Purpose 8

To develop innovative teaching and learning environments that enhance the learning process, provide convenience and access for the independent learner and that reinforce the College's unique identity in the eyes of its various publics.

#### **Core Indicators:**

- 1. Demonstration of student participation in independent learning opportunities
- 2. Student satisfaction with independent learning opportunities



# REPORT ON INSTITUTIONAL EFFECTIVENESS

Annually, in October, Estrella Mountain will publish a report on institutional effectiveness to document the results of the core indicators. This report will include the following components:

- results of measurement of core indicators for the previous academic year
- evaluation of strengths and concerns regarding core indicator measurements
- goals for each core indicator for the next academic year
- continuous improvement plans to improve core indicator results
- resources needed to implement continuous improvement and/or measurement

# **CONTINUOUS IMPROVEMENT**

The key internal stakeholders for each category of institutional effectiveness are responsible for documenting and implementing continuous improvement.

A working draft of a continuous improvement template has been created. It constitutes a plan for improvement and will be included in the report on institutional effectiveness. Key internal stakeholders will complete this template for each category of institutional effectiveness. The templates will then be reviewed by the Plan for Institutional Effectiveness Team and then presented to the Estrella Mountain Leadership Council. The continuous improvement template is included as Appendix H.





# COMMUNICATING THE PLAN FOR INSTITUTIONAL EFFECTIVENESS



The Plan for Institutional Effectiveness has little value if it is not effectively communicated to both internal and external stakeholders. Stakeholders participation enhances communication and is central to the communication effort. The following are communication activities that are being used to ensure that the Plan and its results will be communicated effectively.

- ◆ Internal and external stakeholders will continue to be included in the development and implementation of core indicators of effectiveness (The focus groups that were used during the development of the core indicators are examples of this strategy).
- Key stakeholders (employees directly responsible for a college purpose) will be responsible for identifying success and continuous improvement plans related to core indicators.
- ♦ The Plan for Institutional Effectiveness will be published on the Estrella Mountain World Wide Web server (www.emc.maricopa.edu/ie).
- ♦ An institutional effectiveness report will be published annually in October and distributed to all internal stakeholders. This report will include results for the previous year's core indicators, goals for core indicators for the coming year, and plans for continuous improvement for each category of institutional effectiveness.
- ♦ Results of core indicators will be summarized in a publicly consumable format and distributed to students and community leaders during the Fall semester every year.



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### **CHALLENGES FOR 1997-98**

Several challenges to the institutional effectiveness process have been identified for the 1997 - 1998 academic year. These challenges are as follows:

- ♦ Core indicators for two new categories of institutional effectiveness need to be developed for Student Development and Community Education.
- ♦ Linkages between the Plan for Institutional Effectiveness and Strategic Planning need to be strengthened.
- ♦ The PIE Team will need to continue to work with the Student Academic Achievement Committee to clarify the relationship between the two planning efforts.
- ♦ The PIE Team needs to further develop and implement the continuous improvement component of the Plan for Institutional Effectivness.
- ♦ External validation of the Estrella Mountain core indicators still needs to be completed.
- ♦ Some Core Indicators of Effectiveness still need to be implemented.
- ♦ Communication of the Plan for Institutional Effectiveness to internal and external stakeholders needs to be enhanced.



# **TIMETABLE**



The following timetable identifies key dates for the implementation of the Plan for Institutional Effectiveness through August of 1998.

A.	Collect Core Indicators of Effectiveness Data for Purposes 1-4 (Note: Purposes 5, 6, 7 and 8 are on hold due to changes being made during the Fallof 1997)	6/2/97 - 9/26/97
В.	Develop Core Indicators for Student Development and Community Education (Focus Groups)	8/4/97 - 10/10/97
C.	Share Core Indicator Data with Key Stakeholders for purposes of continuous improvement	8/7/97 - 10/30/97
D.	Review the current core indicators of effectiveness with the Student Academic Achievement Committee to determine if some measures should be moved to the Student Academic Achievement Plan	8/29/97 -10/10/97
E.	Publish the 1996-1997 Institutional Effectiveness Report on the EMCC Institutional Effectiveness Home Page (Core Indicator Results)	10/1/97 - 10/30/97
F.	Publish an executive summary of core indicator results for external stakeholders	10/1/97 - 10/30/97
G.	Finish development of the Continuous Improvement Template and create a plan of implementation	10/1/97 - 11/14/97
H.	Conduct internal stakeholder validation of Student Development and Community Education Core Indicators	10/6/97-11/28/97
I.	Determine what is done with Core Indicators for revised purposes (i.e. Diversity)	11/4/97 - 12/18/97
J.	Implement the continuous improvement component of the Plan for Institutional Effectiveness	2/2/98 - 4/1/98
K.	Conduct external stakeholder validation of all core indicators	3/1/98 - 4/17/98
L.	Make final modifications to core indicators based on feedback from the external validation process	4/20/98 -5/15/98
M.	Collect Core Indicators of Effectiveness for all Mission Purposes	5/1/98- 9/30/98



Last updated - 9/97



- American Association of Community Colleges. Community Colleges: Core Indicators of Effectiveness. Washington DC: American Association of Community Colleges National Center for Higher Education, 1994.
- American Association of State Colleges and Universities. *JCAR Technical Conventions Manual*. Washington DC: American Association of State Colleges and Universities, 1996
- American Council on Education. Setting The National Agenda: Academic Achievement and Transfer. Washington DC: American Council on Education, 1991.



#### APPENDIX A

#### **Estrella Mountain Mission and Purposes**

#### Mission

Estrella Mountain is a comprehensive community college that meets the diverse and emerging needs of an expanding West Valley population. Students and customers are offered accessible, effective, quality learning environments.

#### **Purposes**

To accomplish our mission, our purposes are:

- 1. to provide a solid foundation of general education so that all individuals are prepared to achieve personal and academic goals and to successfully execute civic and social responsibilities
- 2. to offer coursework and programs that will allow individuals to transfer to four-year institutions for the pursuit of baccalaureate degrees
- 3. to offer developmental education courses, programs, and services that prepare individuals for post-secondary education
- 4. to develop and offer degrees, certificates and courses for employment and upgrading of skills
- 5. to serve as a national model for integration of information technologies into the teaching, learning and working environment
- 6. to actively participate in partnerships with government, business, social service agencies, and other educational entities for improved quality of life and to meet volunteer service needs of the community
- 7. to demonstrate a commitment to diversity through recruiting and supporting capable students, faculty, and staff who are from varied backgrounds and contribute richly different perspectives to the learning environment
- 8. to develop innovative teaching and learning environments that enhance the learning process, provide convenience and access for the independent learner, and that reinforce the college's unique identity in the eyes of its various publics



### APPENDIX B

### PIE Team Membership

Eileen Archibald	Administrative Assistant I, Administration	PSA
Margaret Franco	Administrative Assistant	PSA
Nancy Greenlaw	Manager of Fiscal Services	MAT
James S. Jacob, Ph.D.	Dean of Information Technologies and Administrative Services	MAT
Ernest Lara, Ph.D.	Director of Student Services	Faculty
Homero Lopez, Ph.D.	President	MAT
Chris MacCrate	Director of Academic Computing	Faculty
Joe Ochap	Coordinator, Academic Advisement	MAT
Edmund F. SantaVicca, Ph.I	D. Director of Information Resources	Faculty
Silvia Serrata	Administrative Assistant I, Student Services	PSA
Julie Smith	Curriculum Technician	PSA
Anna Solley, Ed.D.	Dean of Instruction	MAT
Linn Taylor	Director, Student Activities	MAT
Betty Vickrey	Information Commons Manager	MAT
René G. Willekens	Coordinator, Institutional Effectiveness	MAT
Pearl Williams	Director of Developmental Education	Faculty

(Note: Faculty, PSA and MAT represent employee groups. PSA = Professional Staff Association, MAT = Managerial, Administrative, and Technical.)



#### **APPENDIX C**

#### **PIE Team Roles**

The roles of the Plan for Institutional Effectiveness Team are:

- assist key stakeholders to identify and implement core indicators of effectiveness for the purpose of continuous improvement
- produce the annual Plan for Institutional Effectiveness
- produce the annual Institutional Effectiveness Report
- ensure that the Plan for Institutional Effectiveness follows the Estrella Mountain Institutional Effectiveness Guiding Principles
- ensure that the Plan for Institutional Effectiveness continues to be integrated with the Student Academic Achievement Plan, strategic planning and future institutional self studies
- ♦ communicate the Estrella Mountain Core Indicators of Effectiveness to external and internal stakeholders
- define the ongoing role of the PIE Team



#### APPENDIX D

#### Definition of a Core Indicator of Effectiveness and a Measure

#### **Definition of a Core Indicator**

A core indicator is a widely recognized outcome of a category of institutional effectiveness.

#### The following are characteristics of a core indicator.

- is related to mission and purposes and other categories of effectiveness
- ♦ is a benchmark (defined as an external standard or internal progress over time)
- can be generalized to other institutions
- must be understood and accepted by external and internal publics
- must be regularly produced and cost effective
- is a "core" outcome that measures the immediately impact of the institution, as opposed to outcomes that may simply provide interesting information

#### **Definition of a Measure**

A measure is the information that is used to evaluate a core indicator.

#### The following are characteristics of a measure.

- sets the parameters for a core indicator
- reflects commonly accepted assessment practices
- can be nontraditional when appropriate
- is collected on a continuous basis
- can be more than one measure per indicator
- together, measures establish a pattern of evidence supporting institutional effectiveness



#### APPENDIX E

#### Institutional Effectiveness Stakeholders & Category Leaders

#### 1. General Education

I.E. Category Leader: Anna Solley

#### Internal

Dean for Instruction and Student Services\* Academic Director/Chairperson

of General Education\* **Faculty** 

Support Staff

**Tutors** 

**Information Resources Staff** Learning Enhancement Staff

Student Academic Achievement Committee

#### 2. Transfer Preparation

I.E. Category Leaders: Margaret Franco, Joe Ochap & René G. Willekens

#### Internal

Dean for Instruction and Student Services\* Academic Director/Chairperson

of General Education\* Director of Student Services\*

**Faculty** Advisors Administration Financial Aid Support Staff **Student Services** 

Information Resources Staff Learning Enhancement Staff

#### External

**External** 

Students

**Employers** 

Universities

Other Community Colleges

North Central Association

of Colleges and Schools

Students **Employers** Universities

Other Community Colleges

K-12 Schools

North Central Association of Colleges

and Schools

Maricopa Community College District

Articulation Task Force

#### 3. Developmental Education

I.E. Category Leaders: Linn Taylor, Pearl Williams & Anne Williams

#### Internal

Academic Director/Chairperson of Developmental Education\* Learning Enhancement Staff\* Faculty\* (Math & English)

**Tutors** 

Advisors **Student Services** 

# K-12 Schools

Information Resources Staff

#### **External**

Students

**Literacy Providers** Genesis West Students

AIMES Students

**Employers** 

Social Service Agencies West Valley Skill Center Rio Salado Comm. College Jobs Training Partnership Act

North Central Association of Colleges

and Schools

<sup>\*</sup> Indicates key stakeholders with direct responsibilities for a category of institutional effectiveness.





#### 4. Employment/Career Preparation & Upgrading Skills

I.E. Category Leaders: Nancy Greenlaw, Bernie Ronan and Anna Solley

#### **Internal**

Assistant Dean for Instruction and Student Services\*

Director of Institutional Planning\*

Business Faculty\*
Computing Faculty
Student Services

Advisors LEC Staff

Information Resources Staff Learning Enhancement Staff Maricopa Community College

**Advising Committees** 

#### External

Students Employers

Partners (Wigwam, etc.) Chamber of Commerce

Tech Prep School to Work WESTMARC

Western Enterprise Zone

**Economic Development Offices** 

City Managers Social Services

Arizona Department of Education Jobs Training Partnership Act State Board of Education North Central Association of Colleges and Schools

#### 5. Integration of Information Technology

**I.E. Category Leaders:** Ed SantaVicca, James S. Jacob, and Betty Vickrey

#### **Internal**

Dean, Information Technologies and Administrative Services Academic Director/Chairperson of Academic Computing\*

Director of Computing and

Communications\*

Academic Director/Chairperson of Information Resources\*

Computing Staff

Faculty

**Computing Staff** 

Faculty

Information Resources Staff Learning Enhancement Staff

Support Staff

Information Technology Advisory

Council

Information Technology Operational

Council

#### **External**

Students Employers Universities Internet Users

Other Colleges/Universities

Architects

K-12

Northern Arizona University



<sup>\*</sup> Indicates key stakeholders with direct responsibilities for a category of institutional effectiveness.

#### 6. Community Partnerships & Volunteer Service

I.E. Category Leaders: Silvia Serrata, Linn Taylor and Pearl Williams

Internal	External
Faculty	Student Clubs
Service Learning	Students
Student Services Staff	West Valley Fine Arts Council

Information Resources Staff
Learning Enhancement Staff
All other staff
Community Agencies
Community Partners

Schools K-12
Local Towns/Cities
Volunteer Bureaus
Service Clubs
Campus Compact

#### 7. Diversity

I.E. Category Leaders: Homero Lopez, Julie Smith, and Eileen Archibald

Internal	External
Faculty	Equal Opportunity Comm.
Employees	Student Clubs
Diversity Committee	Arizona Association for
Student Services	Chicanos in Higher Ed.
District Human Resources	Maricopa Black Affairs Association
District Legal Services	Arizona Association of Retired
District Diversity Task Force	Persons
	Gay Lesbian & Human Rights
	Association
	Community
	North Central Association of Colleges
	and Schools

#### 8. Development of the Independent Learner

I.E. Category Leaders: Ernie Lara, Becky Richey, and Julie Smith

Internal	External
Faculty	Students
Staff	Businesses
Student Academic Achievement	Employers
Committee	North Central Association of Colleges
Student Services	and Schools
Information Resources Staff	
Learning Enhancement Staff	
Faculty Support	



#### APPENDIX F

#### **Process Used to Identify Core Indicators and Measures**

#### Step 1:

Explain the purpose of the exercise and provide background on the PIE Focus Groups to participants that are not members of the PIE Team. Review the PIE definition of a core indicator and a measure.

#### Step 2:

Review the literature on institutional effectiveness to identify any nationally recognized core indicators that exist for the selected institutional effectiveness category. Examples of available literature include the American Association of Community Colleges (AACC) Core Indicator of Effectiveness Report and the Joint Commission on Accountability Reporting (JCAR) Conventions. If none exists, skip to step 4.

#### Step 3:

If a nationally accepted core indicator exists, examine the focus group data to determine if there is a match with one of the success categories that was identified by the internal stakeholders. If a match exists, have the team draft a core indicator of success.

#### Step 4:

Continue to examine the focus group data on success categories. Take into consideration the ranking (if any) that the focus group provided. Draft at least two other indicators using the focus group information.

#### Step 5:

Review Estrella Mountain definition of a core indicator of success. Compare the team's drafted core indicators to the definition. Modify or delete core indicators as necessary.

#### Step 6:

Repeat steps 1 through 5 to identify a measure(s) for each core indicator of success.



#### APPENDIX G

#### **Estrella Mountain Core Indicators and Measures**

#### **Institutional Effectiveness Category: General Education**

#### Purpose 1

To provide a solid foundation of general education so that all individuals are prepared to achieve personal and academic goals and to successfully execute civic and social responsibilities.

#### **Core Indicator 1**

Student Attainment of Estrella Mountain Abilities\*

**Measure:** Results of the Estrella Mountain Student Academic Achievement Plan Pilot on Communication (Attainment of other abilities will be added as measures when they are piloted and implemented).

#### Core Indicator 2

Successful Completion of General Education Courses\*

**Measure:** The number and percentage of EMCC students that complete general education courses with a "C" or better, measured at the end of each academic year (June 30).

The percentage of students is calculated using all students still registered after the first week of class for each semester. Grades of "F", "D" and withdrawals after the first week of classes will be counted as non-completers.

General education courses that will be tracked include all courses in the following prefixes: ARH, ASB, AST, BIO, CHM, COM, CIS (AA required classes), CRE, ECN, ENG, ENH, GLG, HIS, HUM, MHL, MAT, PHI, PHS, POS, PSY, and SOC.

#### **Core Indicator 3**

Variety and Depth of General Education Courses Offered and Taken

**Measure A:** The number and percentage of general education courses (AA Degree Specified) made compared to the number of courses offered, measured at the end of each academic year (June 30).

**Measure B:** The number and percentage of required core general education courses (AA Degree Specified) made compared to the number of courses offered, measured at the end of each academic year (June 30).

<sup>\*</sup> Indicates that the core indicator is related to nationally recognized measures of effectiveness.



**Measure C:** The percentage of EMCC students satisfied with the variety and availability of general education courses offered, measured during the Fall and Spring semester via semiannual surveys.

#### **Required Core Courses for AA Degree:**

ENG101,102,107, 108 (6 Credits)- COM100/110/225/230 (3 Credits) - CRE101 (3 Credits) MAT 142/150/ 151/152/172/182/187/212/220/221/225/227/230/231/241/262 (3 Credits) Quantitative Reasoning: GBS221, MAT167, PSY230 (3 Credits) or Computer Applications: AGB139, AJS119, BPC105/110/217, CIS105/ 183/217, CSC101/181/183/225/226, DFT 251/252/253, ECE106, ELE131/241, ELT241/282 (3 Credits)

#### Institutional Effectiveness Category: Transfer Education

#### Purpose 2

To offer coursework and programs that will allow individuals to transfer to fouryear institutions for the pursuit of baccalaureate degrees.

#### **Core Indicator 1**

Successful Student Transfer to Four-Year Institutions\*

**Measure A:** The number of Estrella Mountain students who enroll as new students at four-year institutions, measured on an annual basis.

**Measure B:** The number and percentage of EMCC students who complete 12+ credit hours at EMCC and transfer to a four year institution within two, three, and five years of the start of their program.

**Measure C:** The number and percentage of EMCC students who indicate transfer as a goal and transfer to a four-year institution within two, three, and five years of the start of their program.

**Measure D:** The number and percentage of associate degree completers who transfer to a four year institution within one year of graduation. (This will be measured by an annual graduate survey.)

Note: Arizona State University (Main and West Campuses), University of Arizona, Northern Arizona University, University of Phoenix, and Grand Canyon University will be the first four year institutions to be tracked.



<sup>\*</sup>Indicates that the core indicator is related to nationally recognized measures of effectiveness.

Success at Transfer Institution\*

Measure A: University grade point averages (GPA) of former EMCC students compared to the GPA of native students enrolled in the same university program for the Fall and Spring semesters. This measure will be reported at the end of each academic year (June 30).

Measure B: Number and percentage of former students who have completed at least 12 credit hours at Estrella Mountain and report that their community college education has prepared them well for university coursework. Measured via a survey at the end of each academic year (June 30).

#### **Core Indicator 3**

Degree Program Completion\*

**Measure:** Number of AA and Transfer Partnership degrees awarded by Estrella Mountain, measured at the end of each academic year (June 30).

#### **Institutional Effectiveness Category: Developmental Education**

#### Purpose 3

To offer developmental education courses, programs, and services that prepare individuals for post-secondary education.

#### **Core Indicator 1**

Successful Performance in Developmental Education and Subsequent Related Coursework\*

Measure A: The number and percentage of developmental education students who successfully complete developmental education courses with a "C" or better.

(The cohort is all students enrolled in one or more developmental courses.)

Measure B: The number & percentage of developmental education students who successfully complete a related course within the sequence with a "C" or better, within two years of completing the first course in the developmental education sequence.

(The cohort is all students enrolled in the following developmental courses.)

<sup>\*</sup>Indicates that the core indicator is related to nationally recognized measures of effectiveness.



#### **Related Courses & Sequences:**

ENG061 to ENG071

ENG071 to ENG101

MAT055 to MAT077

MAT055 to MAT104

MAT077 to MAT124 or 129

RDG081 to RDG091

RDG091 to CRE101 (CRE = Critical & Evaluative Reading)

Measure C: Comparison of the achievement of those students who enrolled in the recommended developmental course and later enrolled in a related college-level course with those students who waived directly into a college level course when their ASSET scores recommended developmental placement.

(The Cohort is all students who scored into developmental courses based on ASSET scores and enrolled in ENG101, CRE101, MAT 104, 124, and 129. This cohort includes students who waive their ASSET scores and those that take the related developmental course prior to enrollment.)

Measure D: Comparison of the success rate ("C" or better) of students who enrolled in the recommended developmental course and later enrolled in a related college-level course with those students who scored directly into the college level course.

(Cohort is all students enrolled in the ENG101, CRE101, MAT104, 124 and 129 who either took a development course prior to enrollment or tested directly into the course according to their ASSET scores. Cohort does not include students who waive their asset scores.)

#### **Core Indicator 2**

Continued Enrollment in Other Academic College-Level Courses

Measure: The number and percentage of non-ESL developmental education students who successfully complete selected core academic college-level course(s) with a grade of "C" or better within one year of completing a developmental education course.

(Cohort includes all students who are enrolled in COM110, SOC101, PSY101, BIO101, MAT155, ENG102, PHI101 and have taken a developmental course, other than English as a Second Language, within the past year.)



Goal Attainment of Developmental Student

**Measure:** The percentage of students enrolled in developmental courses who report that they have accomplished a personal goal related to the reasons for enrollment in the course reported at the end of each academic year (June 30).

(Cohort includes all students enrolled in below 100 level math, English and reading. Note: English as a Second Language students are included in this cohort. Goal attainment will be reported at the end of each Fall and Spring semester via journal/survey input.)

#### **Core Indicator 4**

Demonstration of the Use of Instructional Support Services by Developmental Education Students

**Measure:** The number and percentage of developmental education students using tutoring measured at the end of each academic year (June 30).

#### Institutional Effectiveness Category: Career/Employment Skills

#### Purpose 4

To develop and offer degrees, certificates, and courses for employment and upgrading of skills.

#### **Core Indicator 1**

Number of Occupational Degree, Certificate, and Special Program Completers\*

**Measure:** The number of students who complete an occupational degree (AAS), certificate or special program, measured at the end of each academic year (June 30).

Special programs include: the Estrella Mountain TQM Award of Excellence.

\* Indicates that the core indicator is related to nationally recognized measures of effectiveness.



Job Placement & Promotion Rate\*

Measure A (part one): The percentage of positive responses of Estrella Mountain graduates to the following employment related questions.

- report being employed within one year of graduation
- report employment related to their field of study within one year of graduation (percent of employed graduates)
- report that their community college degree contributed to their obtaining employment (percent of employed graduates)
- report that their degree helped them receive a promotion or obtain a better paying job within one year of graduation (percent of employed graduates)
- ◆ report that their college degree has contributed to improved job performance (percent of employed graduates)
- ◆ report that their college degree has helped them to retain their employment (percent of employed graduates)

Measure A (part two): The percentage of Estrella Mountain certificate and special program completers who respond positively to the following employment related questions.

- are employed within six months of completing a certificate
- report employment related to their training within six months of completing their program (percent of employed completers)
- ◆ report that their community college certification contributed to their obtaining employment (percent of employed completers)
- report that their Certificate helped them receive a promotion or obtain a better paying job within six months of completing a program (percent of employed completers)
- report that their certificate has contributed to improved job performance (percent of employed completers)
- report that their certificate has helped them to retain their employment (percent of employed completers)

Measure B: The mean annual salaries of Estrella Mountain students measured at the start of their program and six months and one year after completion of an AA, AGS, ASB, AAS, and/or occupational certificate.

(This will be measured with graduate surveys and Department of Economic Security Data when this data source becomes available.)

Note: Certificate completer surveys will be sent within 6 months of program completion and graduate surveys will be sent within 12 months of graduation to all AA, AGS, ASB and AAS graduates. Employment means that a graduate is working at a job, enlisted in the military or self-employed.



<sup>\*</sup> Indicates that the core indicator is related to nationally recognized measures of effectiveness.

Employer Feedback\*

Measure A: The number and percentage of employers who report benefiting from company sponsored training services provided by Estrella Mountain, measured at the end of each academic year via a survey (June 30).

Sample Employers: The Wigwam Resort, City of Avondale, City of Tolleson, Tolleson Elementary School District, and Power Packaging, Incorporated.

Measure B: The percentage of employers in the Estrella Mountain service area who indicate that the College is responsive in developing and delivering programs to meet their training needs, measured on an annual basis at the end each academic year (June 30).

#### **Core Indicator 4**

Goal Attainment of Non-Degree Career/Employment Students

Measure: The number and percentage of non-degree seeking students taking classes for job-related reasons\*\* who report that the completion of selected occupational courses has helped them achieve employment, a promotion or improved job performance or other goal. This will be measured via a mailed survey at the end of each academic year (June 30).

\*\* Cohort includes all students who indicate a career/job related reason for enrolling (goal statement) and take any occupational class during the academic year. Surveys will be mailed during the month of June.

#### **Institutional Effectiveness Category: Integration of Technology**

#### Purpose 5

To serve as a national model for integration of information technologies into the teaching, learning, and working environment.

The two areas of concern for this purpose statement are (1) the inability to measure a national model status and (2) the use of the term "integration". The PIE Committee has recommended that we proceed with the following core indicators and measures which focus on the USE rather than INTEGRATION of technology, along with a recommendation to the Self-Study Committee that the College readdress the purpose statement next year.

<sup>\*</sup> Indicates that the core indicator is related to nationally recognized measures of effectiveness.



Availability and Use of Information Technologies in the Teaching and Learning Environment

**Measure A:** Number of computers available for student use.

**Measure B:** Percentage of computers connected to the campus network available for student use.

**Measure C:** Percentage of computers with Internet access that are available for student use.

**Measure D:** Percentage of students with electronic mail accounts.

**Measure E:** Number of instructional software applications available via the campus network.

**Measure F:** Number of classes, by discipline, that use technology in their curriculum.

**Measure G:** Number of class sessions, by discipline, scheduled in the electronic classrooms.

**Measure H:** Number of training opportunities in the use of technology available to students.

**Measure I:** Number of students using the Information Commons.

#### **Core Indicator 2**

Availability and Use of Information Technologies in the Working Environment

**Measure A:** Number of computers available for use by employees.

**Measure B:** Percentage of employees that have computers for their full-time use.

**Measure C:** Number of training opportunities in the use of technology offered to employees.

**Measure D:** Number of office productivity software applications available for employee use.

**Measure E:** Percentage of employee computers connected to the campus network.

Measure F: Percentage of employee computers with Internet access.

Measure G: Percentage of employees with electronic mail accounts.



#### **Institutional Effectiveness Category: Partnerships**

#### Purpose 6\*\*

To actively participate in partnerships with government, business, social service agencies, and other educational entities for improved quality of life and to meet volunteer service needs of the community.

#### **Core Indicator 1**

Demonstration of Partnership Development

**Measure A:** Number of social service agencies, businesses, school and governments who are engaged in partnerships with EMCC, measured at the end of each academic year (June 30). See Partnership definition.

**Measure B:** Number of students and staff who volunteer their time in the community, measured at the end of each academic year (June 30).

#### **Core Indicator 2**

Demonstration of Benefits to Estrella Mountain Partners

Measure: The number and percentage of Estrella Mountain partners who report benefiting from services provided to them by Estrella Mountain, measured at the end of each academic year (June 30).

(Note: This measure incorporates training-related partnerships, which is a core indicator for Estrella Mountain's Employment/Career purpose. Collection of measurement data will be coordinated between purposes.)

#### **Definition of a Partner**

An EMCC partner is any government, business, social service agency or educational entity which engages in a cooperative venture with EMCC and has some form of written documentation of the agreement. Written documentation does **not** need to be formal and can include evidence such as letters, checks, contracts, electronic mail, registration forms, rental agreements and other forms of physical evidence.

A partnership agreements should include at least one of the following features.

- ♦ Customized/Enhanced Product Offering
- ♦ Sponsorship
- ♦ Resource Sharing

<sup>\* \*</sup> The PIE Team has interpreted this purpose statement as follows: "To actively participate in partnerships with government, business, social service agencies, and other educational entities to enhance community development and meet volunteer service needs of the community.



#### **Institutional Effectiveness Category: Diversity**

#### Purpose 7\*\*

To demonstrate a commitment to diversity through recruiting and supporting capable students, faculty, and staff who are from varied backgrounds and contribute richly different perspectives to the learning environment.

#### **Core Indicator 1**

Employee Demonstration of Respect and Tolerance for Individual Differences

**Measure A:** The number of strengths identified on the annual Estrella Mountain Workplace Diversity Climate Survey.

**Measure B:** The number of strengths identified on the annual Estrella Mountain Teaching and Learning Environment Diversity Climate Survey.

#### **Core Indicator 2**

The Degree to Which the College Adheres to All Federal, State, and District Policies Regarding Diversity

Measure: Compliance report results documented on an annual basis.

#### **Core Indicator 3**

The Degree to Which the College Reflects the Demographics of its Service Area in its Student Population.

**Measure:** The breakdown of student ethnicity compared to the breakdown of Estrella Mountain service area ethnicity measured on an annual basis at the end of each academic year (June 30).

#### **Core Indicator 4**

The Number of College Courses, Initiatives, and Services Offered that Support Diversity

The criteria used for this core indicator are:

- ♦ a course or program in which the *main focus* of content is a particular culture, ethnicity or other "protected class", or which presents students with unique perspectives regarding any culture
- a service that exists *primarily* to meet the needs of students in a "protected class", as defined by EEOC

**Measure A:** Number of diversity-related courses offered and made, measured at the end of each academic year (June 30).

Diversity is acknowledging and respecting similarities and differences in culture, backgrounds, and identity. The Estrella Mountain community encourages unique perspectives and values.



<sup>\*\*</sup> Note: The PIE Team in interpreting Diversity to mean....

**Measure B:** Number and percentage of students enrolled in diversity related courses, measured at the end of each academic year (June 30).

**Measure C:** Number of diversity-related initiatives in which students and staff participate, measured at the end of each academic year (June 30).

**Measure D:** Number and kind of services supporting diversity, measured at the end of each academic year (June 30).

#### **Institutional Effectiveness Category: Independent Learner**

#### Purpose 8\*\*

To develop innovative teaching and learning environments that enhance the learning process, provide convenience and access for the independent learner and that reinforce the College's unique identity in the eyes of its various publics.

#### **Core Indicator 1**

Demonstration of Student Participation in Independent Learning Opportunities

Measure A: Number and percentage of students who register for independent learning opportunities, measured at the end of each academic year (June 30).

Measure B: Number and percentage of students who successfully complete independent learning opportunities with a grade of "C" or better, measured at the end of each academic year (June 30).

Measure C: Number of students who independently utilize resources in the Learning Enhancement Center *specifically*, and the Information Commons *generally*, measured at the end of each academic year (June 30).

#### **Core Indicator 2**

Student Satisfaction With Independent Learning Opportunities

Measure: The number and percentage of students enrolled in independent learning opportunities who report that they are satisfied with the opportunity, measured during the fall semester on a biannual basis (customized question on the Noel Levits Survey).

\*\* The Independent learner purpose is being interpreted in relation to learning that occurs outside of a structured environment. There are two areas of concern for this purpose statement (1) the confusion as to the major emphasis of the Purpose (teaching and learning environment, convenience and access, or independent learner); and (2) whether the development of the independent learner is more appropriately addressed as an outcome of the SAAP ability #6 - Personal Development. The PIE Team has recommended that Estrella Mountain proceed with a limited interpretation of independent learner, along with a recommendation to the Institutional Self-Study committee that the College readdress the purpose statement next year.



#### **PIE Continuous Improvement Plan Template**

Date Completed:		
<b>Category of Instit</b>	utional Effectiveness:	
Key Stakeholders	:	
Names	Title	
-		

- 1. Describe any documented improvement in your core indicators for the pervious academic year. Include a summary of continuous improvement efforts and probable causes for the improvement.
- 2. Based on the core indicator results, please identify any areas for improvement. If there is more than one area for improvement, prioritize the list.
- 3. Indicate a short-term (one academic year) and a midterm goal (3 years) for each core indicator.
- 4. Provide a timetable of activities designed to continuously improve the core indicator results for this category of institutional effectiveness.

For questions 1, 2, 3 and 4 please attach a separate sheet.





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